ASSIGNMENT #2: MISLEADING VISUALIZATION

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References to papers and books look like this [2].

References to sections look like this: section 1

References to figures look like this: Figure 1

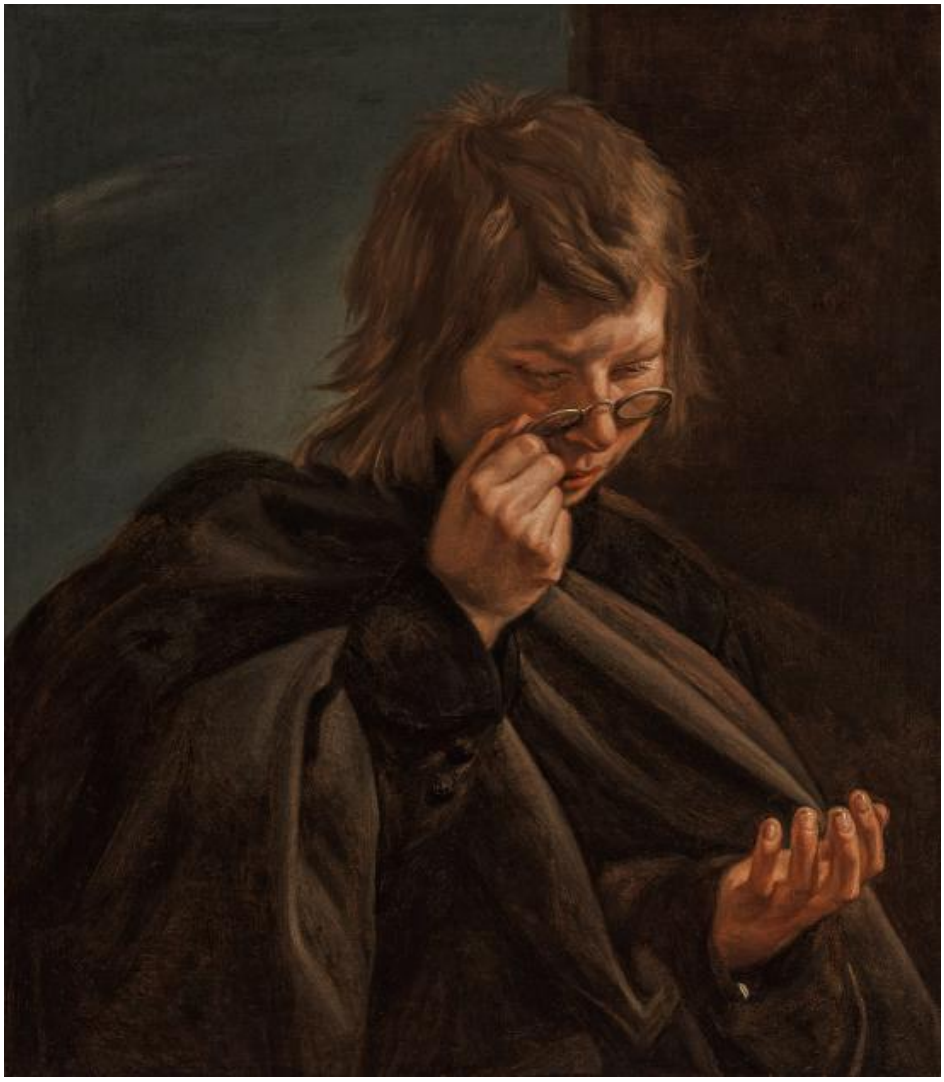

Figure 1: Figure captions look like this. You can change the size of the figure using the `width` *parameter in the* `\includegraphics` *command. You can change the position of the figure using the position arguments in the* `\begin{figure}` *environment command. URLs look like this:* `https://www.mfa.org/exhibition/michaelina-wautier-and-the-five-senses`

1 Visualizations

The following are the two Visualizations that I have created for this Assignment:

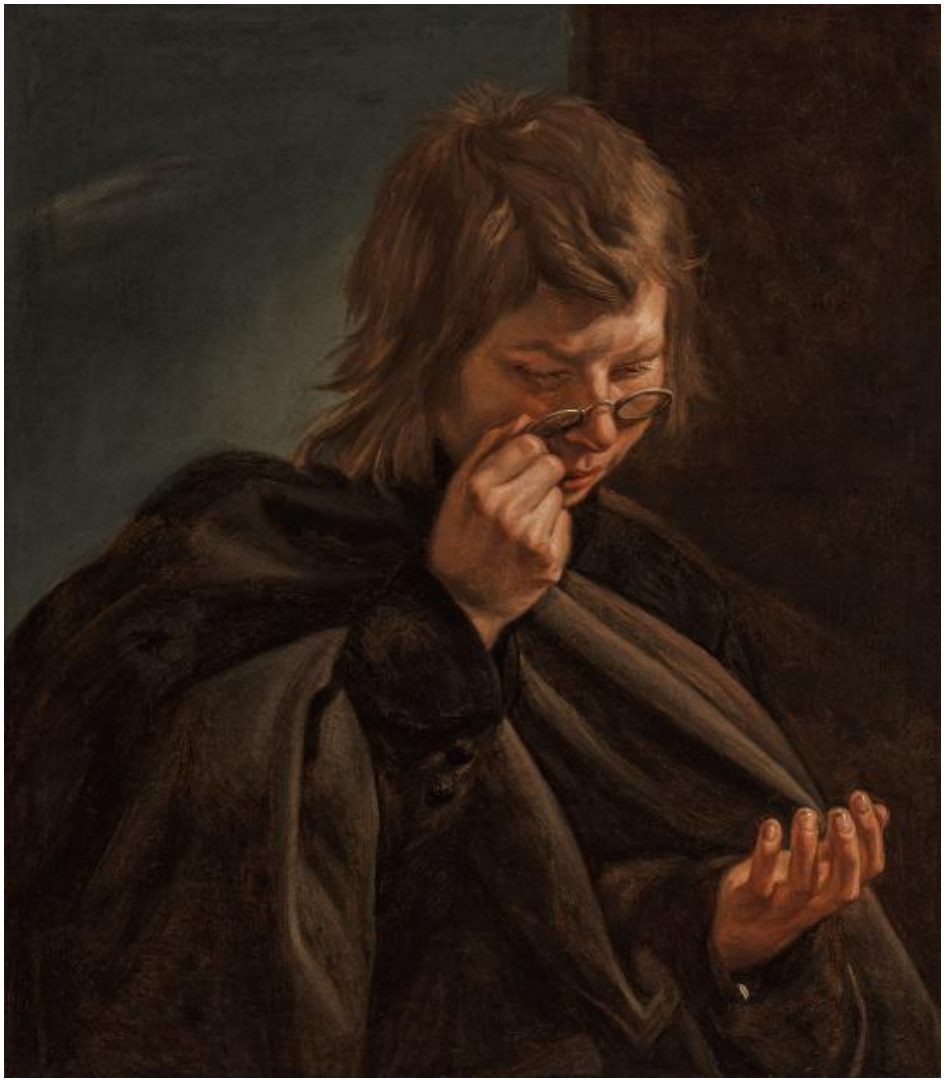

Figure 2: Visualization #1

2

2.1 Misleading Visualization

2.1.1 Topic Ideation

For the Misleading visualization I had a few thoughts:

- Immigration and Crime correlations: Showing an extrapolated correlation between immigration and crime rates could be made misleading by selecting data points that support a biased narrative. For example, not filtering by region, and actively sampling from regions with high crime rates.
- Ethnically Biased Drug Usage: Using the "US Drug overdose death rates, by drug type, sex, age, race, and Hispanic origin" [1] dataset, we use missleading bar charts to exaggerate the correlation between hispanic heritage and drug consumption. Additionally, by filtering out specific drugs we could make it especially
- Misleading use of colors to imply significance.
- Inappropriate use of 3D effects to distort perception.

- Cherry-picking data points to support a biased narrative.

2.1.2 Topic Selection and Question

2.1.3 Misleading Qualities

References

[1] *Drug Overdose Death Rates by Drug Type, Sex, Age, Race, and Hispanic Origin: United States*. Accessed: 2023-10-01. 2021. URL: https://catalog.data.gov/dataset/drug-overdose-death-rates-by-drug-type-sex-age-race-and-hispanic-origin-united-states-3f72f.

[2] Tamara Munzner. *Visualization analysis and design*. CRC press, 2014.